

REMARKS/ARGUMENTS

1. In the above referenced Office Action, the Examiner rejected claims 1-2, 4, 16-17, 19, 31-32, and 34 under 35 USC § 103 (a) as being unpatentable over Aldous (U.S. Patent No. 5,650,669) in view of Oh (U.S. Pub. 2002/0065618); and claims 6, 21 and 36 under 35 USC § 103 (a) as being unpatentable over Aldous (U.S. Patent No. 5,650,669) in view of Oh (U.S. Pub. 2002/0065618) and further in view of Pascucci (U.S. Patent No. 5,768,115). In addition, the Examiner rejected claims 7, 22, and under 35 USC § 112, second paragraph, as being not enabled by the specification and claims 3, 18, and 33 under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. Examiner indicated that claims 5, 20 and 35 would be allowable if rewritten in independent form.

Applicant thanks the Examiner for the allowability and favorable treatment of claims 5, 20 and 35. Claims 1-6, 16-22, 31-37 are currently pending in this application. Claims 8-15 and 23-30 have been withdrawn. Claim 7 has been cancelled. Claims 1, 3, 4, 7, 16, 18, 19, 22, 31, 33, 34 and 37 have been amended. The rejections above have been traversed and, as such, the applicant respectfully requests reconsideration of the allowability of claims 1-4, 6, 16-19, 21-22, 31-34 and 36-37.

2. As discussed above, claims 7, 22, and 37 were rejected for having insufficient support in the specification. As set forth on page 13, lines 17-23 of the specification:

When the alternate power source is not present, the alternate power source sense circuit 104 generates the enable/disable signal 106 to enable the first DC-to-DC converter 100 and to disable the second DC-to-DC converter 102. The alternate power source sense circuit 104 may determine the presence or absence of the alternate power source 68 by comparing its voltage to that of the supply voltage. If the alternate power

source voltage compares favorably to the supply voltage, it is deemed to be present. [Emphases added]

The term “compares favorably” is discussed in the specification on page 16, lines 25-31:

“As one of average skill in the art will further appreciate, the term “compares favorably”, as may be used herein, indicates that a comparison between two or more elements, items, signals, etc., provides a desired relationship. For example, when the desired relationship is that signal 1 has a greater magnitude than signal 2, a favorable comparison may be achieved when the magnitude of signal 1 is greater than that of signal 2 or when the magnitude of signal 2 is less than that of signal 1. “

If, for instance, a 5v external source is used to generate a 1.8v power supply, the desired relationship can be any of the following:

- a. the external source voltage is greater than the supply voltage;
- b. the external source voltage is greater than twice the supply voltage;
- c. the external source voltage is greater than the supply voltage plus 3 volts;

...

In each of these cases, if true, the comparison is favorable and the external power source is deemed to be present. Original claims 7, 22 and 37 each recited that “when the supply voltage compares unfavorably to the voltage on the node, determining that the alternate power source is present.” Claims 22 and 37 have been amended to state this relationship more clearly as, when the voltage on the node compares favorably to the supply voltage, determining that the alternate power source is present. As will be discussed further below, claim 1 has been amended to include this language and claim 7 has been cancelled. Support for these amendment is set forth on page 13, lines 17-23 of the specification. No new matter has been added.

Applicant believes that this correction renders these claims fully supported and respectfully requests that this rejection be withdrawn. Because this was the only basis for rejecting claims 22 and 37, Applicant further believes that these claims are therefore allowable.

3. Claims 3, 18, and 33 were rejected as being indefinite as discussed above. In particular, the Examiner objected to the term “voltage regulation sensing” used as a noun. Claims 3, 18 and 33, and claims 4, 19 and 34 that depend therefrom have been amended to use the term “regulation voltage” along with the terms “active regulation voltage” and “disabled regulation voltage”. Support for these amendments is presented on page 14, lines 4-30 of the specification. No new matter has been added.

Applicant believes that these corrections render these claims fully supported and respectfully requests that this rejection be withdrawn. Because this was the only basis for rejecting claims 3, 18 and 33, Applicant further believes that these claims are therefore allowable.

4. Claim 1, 2, 4 were rejected based on the combination of Aldous and Oh, and claim 6 was rejected based on the combination of Aldous, Oh and Pascucci. Claim 1 has been amended to include the revised language of claim 7 that recites, in part:

sensing for presence of an alternate power source by comparing the supply voltage to a voltage on a node operably coupled to the alternate power source, when the voltage on the node compares favorably to the supply voltage, detecting the presence of the alternate power source;

The combination of Aldous and Oh does not disclose such a feature. In contrast, Aldous discloses that the microprocessor 22 detects, through input line 60, that AC power source 34 is active and supplying power to module 20, microprocessor 22 will use AC power source 34 (see Aldous, Col. 9, lines 44-52.) Aldous does not disclose suggest or teach the

comparing the supply voltage and the voltage on a node coupled to the alternative power source.

For this reason, Applicant believes that claim 1 and claims 2-6 that depend therefrom, are patentably distinct from the prior art.

5. Claim 16, 17 and 19 were rejected based on the combination of Aldous and Oh, and claim 21 was rejected based on the combination of Aldous, Oh and Pascucci. Claim 16 has been amended to recite, in part:

“disable a first control loop of a first DC-to-DC converter, wherein, when enabled, the first DC-to-DC converter converts battery voltage from a battery, coupled via an external inductor to an integrated circuit pad of the battery optimized system on a chip, into a supply voltage;”

Support for the amendment is shown on page 13, lines 25 – 31 of the specification and in Figure 4. No new matter has been added.

In contrast, Aldous does not disclose, suggest or teach a system on a chip integrated circuit or an integrated circuit pad that couples the battery via an external inductor. For this reason, Applicant believes that claim 16 and claims 17-22 that depend therefrom, are patentably distinct from the prior art.

6. Claim 31, 32 and 34 were rejected based on the combination of Aldous and Oh, and claim 36 was rejected based on the combination of Aldous, Oh and Pascucci. Claim 31 recites, in part:

“a first DC-to-DC converter, when enabled, operable to convert a battery voltage, operably coupled to an integrated circuit pad of the battery optimized system on a chip, into a supply voltage;”

Support for the amendment is shown on page 13, lines 25 – 31 of the specification and in Figure 4. No new matter has been added. In contrast, Aldous does not disclose, suggest or teach a system on a chip integrated circuit or an integrated circuit pad that is operably coupled to the battery.

For this reason, Applicant believes that claim 31 and claims 32-37 that depend therefrom, are patentably distinct from the prior art.

For the foregoing reasons, the applicant believes that claims 1-6, 16-22, and 31-37 are in condition for allowance and respectfully request that they be passed to allowance.

The Examiner is invited to contact the undersigned by telephone or facsimile if the Examiner believes that such a communication would advance the prosecution of the present invention.

A petition for one-month extension and payment form are attached to this response. No additional fees are due. The Commissioner is authorized to charge any additional fees that are required or credit any overpayment to Deposit Account No. 50-2126 (Docket SIG000096).

RESPECTFULLY SUBMITTED,

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